Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended): A filter for use with a fuel cell comprising:

an inlet, an outlet, and a medium made from perfluorinated sulfonic acid polymer and disposed between the inlet and the outlet, wherein fuel exiting the filter contains less metal ions than fuel entering the filter, wherein the perfluorinated sulfonic acid polymer is substantially similar to the polymer ~~exchange~~ electrolyte membrane in the fuel cell and includes at least one catalyst.

Claim 2 (original): The filter of claim 1 being connectable to a fuel supply.

Claim 3 (original): The filter of claim 1 being positioned in a fuel supply.

Claim 4 (original): The filter of claim 1 being connectable to a fuel cell.

Claim 5 (original): The filter of claim 1 being positioned in a fuel cell.

Claim 6 (original): The filter of claim 1 being positioned in an electronic device powered by a fuel cell.

Claim 7 (original): The filter of claim 1 further comprising a housing encasing the medium.

Claim 8 (original): The filter of claim 1, wherein the perfluorinated sulfonic acid polymer medium is shredded.

Claim 9 (original): The filter of claim 1, wherein the perfluorinated sulfonic acid polymer medium is in the form of ingots.

Claim 10 (original): The filter of claim 1, wherein the perfluorinated sulfonic acid polymer medium is made into a textile web.

Claim 11 (original): The filter of claim 10, wherein the textile web is a nonwoven web.

Claim 12 (original): The filter of claim 10, wherein the textile web is a woven web.

Claim 13 (original): The filter of claim 1, wherein the perfluorinated sulfonic acid polymer medium is made into powder form.

Claim 14 (original): The filter of claim 1, wherein the medium is wetted before use.

Claim 15 (original): A fuel supply for a fuel cell comprising:

an outer casing containing fuel with a first amount of ions therein, and

an ion filter supported by the casing, said ion filter is in fluid communication with said fuel, said ion filter comprises a filter material made from a perfluorinated sulfonic acid polymer and at least one catalyst and the filter material is substantially similar to the polymer electrolyte membrane in the fuel cell;

wherein upon flowing said fuel through said ion filter, the fuel exiting the ion filter has a second amount of ions less than said first amount of ions.

Claim 16 (currently amended): The fuel supply of claim 15, wherein the ion filter includes discrete pieces of the filter material.

Claim 17 (canceled)

Claim 18 (original): The fuel supply of claim 15, wherein the filter material is shredded.

Claim 19 (original): The fuel supply of claim 15, wherein the filter material is wetted before use.

Claims 20-23 (canceled).

Claim 24 (previously presented): The filter of claim 1 operatively connected to a sensor to measure the electrical conductivity of the fuel.

Claim 25 (previously presented): The fuel supply of claim 15 operatively connected to a sensor to measure the electrical conductivity of the fuel.

Claim 26 (new): The filter of claim 1 wherein the at least one catalyst is unsupported by a base material.

Claim 27 (new): The filter of claim 1, wherein the at least one catalyst comprises platinum or ruthenium.

Claim 28 (new): The fuel supply of claim 15, wherein the at least one catalyst is unsupported by a base material.

Claim 29 (new): The fuel supply of claim 15, wherein the at least one catalyst comprises platinum or ruthenium.

Claim 30 (new): A fuel cell system comprising:

a fuel cell having a polymer electrolyte membrane, wherein during operation said polymer electrolyte membrane converts a fuel cell fuel to electricity;

a fuel supply storing the fuel cell fuel to be transported to the fuel cell; and

an ion filter comprising a filter medium, wherein said filter medium is made from a material substantially the same as said polymer electrolyte membrane of said fuel cell, and wherein the ion filter is located upstream from the polymer electrolyte membrane and removes ions from the fuel cell fuel.

Claim 31 (new): The fuel cell system of claim 30, wherein the ion filter is located inside the fuel supply.

Claim 32 (new): The fuel cell system of claim 30, wherein the ion filter is located inside an electrical device that the fuel cell powers.